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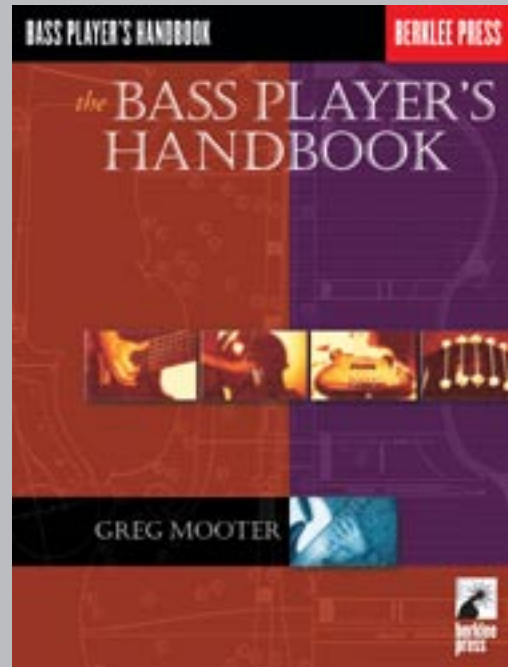
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The Bass Player's Handbook

Greg Mooter

Chapter 10

Creating and Maintaining
an Effective Practice Schedule



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Creating and Maintaining an Effective Practice Schedule

To learn is to do. Let's pretend that you want to become a marathon runner. First, you would identify that you liked to run and seemed to be pretty adept at it. Eventually, you would need to hire a trainer with the knowledge of how to build your body properly. Next, you would need a coach to help you prepare for each individual race. You, your trainer, and your coach would all work in tandem to help you reach your goal. All the while, what would be your primary activity? Running, doing.

How long would this training, coaching, and doing go on? Well, this is the \$64,000 question. Professional runners have coaches, trainers, and other hired help aiding them throughout their careers. Many casual runners seek professional help on a regular or an as-needed basis. No one in their right mind would attempt running a marathon without some guidance and rigorous training at a gym and in the field.

There are varying levels of preparation and varying levels of dependency on outside help needed to guide people to their goals. The keys are the setting of the goal and the doing, the action of going about attaining the goal. I call this doing *gyo* (a term I picked up from of an Eastern philosophy book, years ago). To me, *gyo* is conscious action, or doing, through guided force. It is taking the positive steps to gain through action. You might liken it to positive motivation. In so doing, it becomes easier to understand why some runners are so natural, such perennial winners, so all inspiring, so talented, so strong, so energetic, and so on. These runners possess *gyo* and know how to put it to good use. They have the knowledge of how to do.

And so it is, as a performer. But it is not as easy as I have made it seem to be. It is true that all you need do is set your goal and go about attaining it, but so much happens in between.

You teach yourself to read, you join a funk band, someone shows you how to slap, you get a show gig, you get a double bass for free from your uncle, you buy a bow, you take lessons, and then . . . you quit. Well, you get the point. We all have dynamic lives that cannot be predicted. So, how do we hold onto our goals?

The answer is simple. It is not so important to *hold on* to goals as it is to *have* goals. People change, goals change. What is important is *gyo*! You will need to reevaluate, and oftentimes change your goals. It is the *gyo* that causes this.

Think about all of your musician friends, for a minute. Let's put them into groups. Then you decide which group you fit into.

Beginners. Enough said. Beginners need to work on every aspect of their musicianship, and should have a well-rounded practice session, emphasizing technique, but also touching on ear training and musical development.

Street Players. These players are very adept at one or two styles, which they learned by ear from CDs or hanging with friends. They probably play casually a lot and might have a gig. Street players would be well-served to develop their reading skills and to explore styles beyond what they usually play.

Technically Challenged Players. They can't really play very well. Technically challenged players can't seem to get the feel or the technique down. They just don't understand what to do, but they love to play. Regular attention to technical studies, such as scales, arpeggios, and various fingerboard exercises, will help technically challenged players improve their skills, as will a good teacher.

Forcers. They read but sound like they are reading. When they play, you sometimes think you are listening to a machine. Practicing by ear, widening their use of articulations, and learning to improvise can help these players to develop a more human sound.

Jazzers. The jazzers possess natural talent. They can play almost anything that they hear and can fake their way through many situations, but they may be style restricted. Jazzers should broaden their abilities to include other styles into their repertoire.

Rockers. Rockers are limited jazzers. They are often stylistically restricted. Rockers should also work to bring other styles into their repertoire.

Semi-Pros. Semi-pros are conscientious players who take or took lessons and try to cover all the bases. Semi-pros are everywhere. They need only conscientious work and time to develop their abilities.

Pros. The pros seem to do it all with little or no effort and are paid well to do it. They are not necessarily prepared for any situation, but rather, are willing to prepare for any situation. Pros are committed to being the best and command respect from the rest. Their practice time can focus on learning more music and maintaining their chops.

Where do you fit in? Well, I have good news for you. You can fit in anywhere and still be successful. But it is important to see where you fit in. You must come to an understanding of where you are, if you are to have any chance at setting goals for your future.

Armed with self-knowledge, a love for music (and of course, for bass playing), and the desire to improve, you can set some goals.

You should spend a week or so initially thinking about what your goals might be. Jot down the ideas that come back again and again. Look over your ideas, think about your spot on the above list, consider your age, and consider your time constraints. Be honest with yourself, and evaluate your present state of motivation. All of this evaluating will gain you deeper self-knowledge and will point in positive directions. A goal or several goals will become clear in time. Then, you must commit to your goals.

It is at this point that the gyo takes over. After identifying goals, you must go about attaining them. We already know that this is through doing, but the doing must be directed. Unguided doing is chaos and can only lead to random results, at best.

As with the runner, the musician often seeks help from others more versed in the craft. Much knowledge and a clearer picture of oneself can be gained through a relationship with an instructor. I can't tell you how to find an instructor, but I can suggest some of the attributes that a qualified instructor will have.

Look for someone who exudes self-knowledge and confidence, someone playing all of the things that you want to play, someone able to communicate clearly. Find someone who is busy but can find time for you, someone who can motivate you, someone you can trust, someone with the patience of Job.

Use your teacher, trust your teacher, and if you must, fire your teacher. For many, the teacher/student relationship lasts a lifetime. Search until you find your teacher.

Your studies may require weekly lessons. Many teachers have the need to set up a regular schedule, and a regular schedule is usually the best regime for the student. Some prefer biweekly or monthly meetings.

Some sacrifices may need to be made to secure your lesson time. I was once on a waiting list for two years, hoping to study with Charlie Banacos, a noted music guru in the Boston area. When he finally called me with an opening, it was for 7:30 AM every Saturday! Needless to say, I made some major adjustments to be prepared for his guidance each Saturday morning.

In time, you may have lessons only as needed. This relationship will be malleable and ever-changing, but always guided by the teacher with the student's growth in mind.

So, you like playing the bass, you have done some soul searching, and you know where you are. You have taken the time to consider setting musical goals, and you have come to know that study, possibly through a teacher, will help you attain your goal. It's about time you learned how to practice.

You know what they say, "practice makes perfect." I don't know if it's true or not, but it sure can help.

Consider how valuable your time is, and realize that you will be investing your time into your practice. Don't waste your time, value it. When you realize that your practice time is a major means of attaining your goals, it becomes clear how important this time is. Your practice time must be planned, dynamic, and regular to be most effective. Haphazard practice does achieve results, but never of the magnitude attainable through the rigors and discipline of regular, intense practice.

The specific content and duration of your practice will be determined by your individual circumstances. Your teacher can be a great aid in determining these factors. There are some general guidelines that will help you create and maintain a good practice schedule.

Humans are creatures of habit, living in a world that repeats itself every day. With this said, the most important aspect about your practice schedule is that it needs to be regular—preferably, daily. You will achieve the best results if you can integrate your practice schedule into your daily life. In so doing, you can actually cause yourself to "need to practice," which is a great help for those of us without optimum motivation. One could go further and consider practicing every day at the same time. For some, this is the optimum, but others need be careful of burnout or getting into a rut. Self-knowledge and a sense of human nature are the keys to getting yourself on track to a successful practice schedule.

Always consider your ultimate goal, but now, be ready to set interim, short-term goals that will ultimately lead you to your final goal. Reevaluate every six months or so to be sure you are still on track or to decide whether you need to adjust or change your track.

To help create a “need to practice,” start off by not allowing yourself enough time to accomplish all of your tasks. Stay focused and work hard. Don’t waste time. You will realize that you need more time to finish your work. After a short while, you should add time, as needed. Never alter your practice habits drastically, all at once, as this will cause chaos within your musical anatomy.

I have heard of players utilizing practice times from ten minutes to ten hours per day, achieving success at each end of the scale. Of course, success is also a relative term. One practicing ten minutes a day cannot expect to make great leaps in their abilities from week to week. On the other hand, one practicing ten hours a day may need to get a life. Or maybe, they have found one.

Performing regularly on gigs, or just playing in a garage band, can restrict the amount of your practice time. For most players, the exertion of “real” playing far surpasses the strains attained in the practice room. Performers with day gigs that tax the muscles of their musical anatomy, or players participating in sporting events that use these muscles, need to be mindful of their bodies’ physical limits. They may also need to restrict their practice time.

A practice routine is an exercise program with academic material incorporated into it. As such, I again recommend that the player seek out a competent instructor with whom to work out the physical and mental dilemmas related to playing bass. The specific choices of exercises and the incorporation of academic material can be individualized by the performer (student) and the teacher. There are, however, three areas that practice material can be classified. All are equally necessary for successful practice.

1. Maintain and Build. Each player comes into this with certain physical and mental ability.

As long as we have proper physical technique and our academic foundation is not flawed, we must first maintain our current level, and in time, we need to build upon it. Specific fingering exercises, scale and arpeggio patterns, and stamina exercises are often used for this purpose. Occasionally playing or reading pieces previously mastered can also help to fulfill this area of practice.

2. Personal Interests and Needs. All players have tunes that they want to learn. Many of these can be quite difficult to learn and play. This type of material needs to be incorporated into the practice schedule. Learning can be accomplished through reading or transcribing. In learning a piece from a CD, take the time to transcribe the music on paper first. This action will help you learn the piece more quickly, help to locate errors, and help to improve your reading ability.

You don’t always love what you have to play, but since you love playing bass, you play whatever you need to play. Many players feel this way, and so, there arises a need to

incorporate material that you love into your practice time. Choose material that has personal meaning to you. This type of practice can be particularly enjoyable.

3. Survival Skills. There are sometimes things that must be learned in order to survive. You are playing a show next week, and the part is too difficult for you to sight-read. You just joined a band, your first gig is this Saturday, and you need to learn eighteen tunes from a tape. You have an audition with an orchestra next week, and they are going to have you play excerpts from Beethoven's Fifth Symphony. These are all examples of needs for your immediate survival as a bass player. Not only does this material need to be incorporated into your practice schedule; at times, this material will supersede all other.

In the end, it is a blend of these that you should strive for, leaning, at times, in one direction or the other, depending on which direction the wind blows.

No matter how long your session is, you need to incorporate four or five specific sections to your practice schedule. If you allow an hour, you could allot about ten to fifteen minutes to each area. As you increase your overall practice time, the centerpieces need to be greatly lengthened while the periphery material may increase only slightly.

Most practice should start with stretching. It is not good to play or stretch, seriously, when cold. If you are cold, play lightly to bring your muscles up to a warmer, more comfortable temperature. When your fingers are at a comfortable temperature, you are ready to begin your stretching. This initial stretching is not meant to be serious, drawn-out stretching, but is intended to loosen up and prepare your musical anatomy for what is to come. All of the areas used during performance should be stretched before any serious practicing is attempted. Many players have "weak spots" or problem areas that they may give some special attention to. Many players don't feel the need to stretch. If they are lucky enough to still be performing in twenty years, they will have changed their minds, and in fact, may need the stretch more than the rest of us, after not stretching for twenty years. Refer to fig. 12.3 for some useful stretches.

After a moderate stretching period, time should be devoted to warming up. Your muscles need to warm up further to function at optimum. This is especially true in colder climates. Find some slow, easy material to use. Repetitive material that uses all of the fingers equally and works all of the arm, shoulder, and back muscles to some degree is good. Some players like to work in some sight-reading at this point.

These two areas of stretching and warming up can be mixed or reversed to some degree as your physical needs and temperatures dictate. If you are a particularly cold-blooded person, or during winter months, it is best to warm up some and then stretch, possibly completing

the warm-up after stretching. Muscles do not properly stretch if cold, and stretching cold muscles can cause injury. Stretching should never be painful. If it is, you are going too far.

The first centerpiece of your practice regime should be *skills* practice—the scales, arpeggios, melodic patterns, chord progressions, and the like, that constitute the foundation of our bass playing. Much of this material will be suggested by your teacher. This practice needs to be intense and ever improving. Additions and subtractions to the materials should be made from time to time. This is mental as well as physical practice, and for most players, it is quite dynamic and fluid.

As your practice time increases, and especially if you are not playing gigs on a regular basis, you should incorporate the second centerpiece: gig situation playing. You must put yourself in the mind of a performer on a gig and play on. This must be as intense as the gigs you can imagine. Concentration is the key to this type of practice, as you could play an entire set of jazz standards or a Mahler symphony from start to finish. No stopping is allowed. Treat this like the real thing. If you have the time for more than one set, take a break and do it again. Gig situation playing is also both mental and physical. It is intended to build physical stamina and concentration.

When your time is becoming short, go to the cool down. It is just the opposite of the warm-up. Relax a little, play something simple, let your mind begin to wander. This can also be a good time to bring yourself back to Earth mentally, and practice a little reading.

Just before you are finished, stretch again. This stretching should be more strenuous than before, since your muscles will be quite warm. Your muscles will stretch quite easily. Hold your stretches for about thirty seconds, if possible. You will find your flexibility will improve from this stretching, and the possibility of injury will decrease. Stretching should never be painful.

Practice is hard work. It consists of physical exertion and guided thinking. It must be this way if you want it to work for you. On the other hand, you may have occasionally experienced wonderful personal performances when you seemingly had no thoughts. This is the balance of the world of opposites in action. There exists thought and no thought. Neither can exist without the other, and each is dependent upon the other. Our ultimate objective is to exercise thought during practice and no thought during performance. This is a difficult ideal to obtain, but the knowledge of its existence helps us to achieve it.

Now, all you have to do is fill in the blanks for your own practice schedule. To keep yourself in top shape, I also recommend regular non-musical exercise. I'm talking about swimming, running, playing soccer, going to the gym, biking—you get the idea. Bass playing doesn't

do a lot for the physical health of our hearts. In fact, the bars, clubs, practice rooms, and restaurants we find ourselves in can actually cause damage to our hearts, and there is nothing worse than a bass player with a damaged heart. Consider getting yourself into some regular activities that promote the well being of your heart. Join a soccer team, buy a bike, or my best idea, join the YMCA or another full service gym.

CHAPTER 11

Warm-Ups

All bassists need to develop an approach to warming up, or preparing their performance anatomy for action. Casual players may not see the need to warm up, due to the fact that they may not presently be taxing their muscles. But as they age, or as performance opportunities become more intense, physical warm-up will become a necessity. Professional players must be at the top of their game at all times, and a methodical warm-up is generally the manner in which they begin a performance or practice. This need to warm up has the added advantage of forcing you to get to the gig early, helping you avoid being docked or fired, as many latecomers are.

Warm-up exercises should have a purpose, or two. Warm-ups need not be difficult; in fact, they should be simple in nature and should not cause stress. Speed is not a factor. Most warm-ups are best performed at slow to medium tempi. Effective warm-up exercises use all of your physical performance anatomy in relatively equal amounts, preparing all parts to function efficiently in performance. Players need to design warm-up programs that suit their performance requirements. Warm-up programs may differ from day to day, depending on the player's immediate needs. There are a number of benefits to be gained from proper warming up.

Personal Preparation

Your muscles function best at around 103 degrees. You may have a gig in Hartford on February 10. After dragging all of your gear into the club, setting up, and pulling out your bass, you might notice that your fingers are still cold, real cold. Might I suggest a little warming up before the first set? This may be an extreme case, but even muscles that are just slightly chilled can be seriously injured by strenuous work. Don't forget that your fingers are

an extremity on your body, and as such, are cooler than your central body. It is a good idea to lightly warm up even on a warm day. Remember that your body temperature is below the 103 degrees that your muscles like for performance, so the warm-up prepares your muscles for the work to come.

The warm-up needs to establish good blood circulation, warm the muscles, and warm the flesh so that the sense of touch feels comfortable. Once all of these needs are met, you are ready to perform.

Effective warm-ups can also prepare the performer mentally for the performance that is about to ensue. Try to make your warm-up mentally stimulating so that your mind can begin to focus on your musical task at hand. Playing all of the major scales, focusing on articulations and fingerings, is a good example of a warm-up that will attend to the needs of all of your fingers equally. Your hands, arms, back, and musical brain will also warm up with an exercise like this.

Technical Promotion

I do not recommend reading warm-up exercises. In fact, I discourage it. It is best to observe *yourself* as you warm up, not the written page. This self-observation can be accomplished visually or mentally. In either case, the warm-up time affords an opportunity to observe our own technique and make corrections or alterations as we see fit.

The slow, direct nature of warm-up exercises makes them excellent devices to strengthen or change one's performance technique. Body angles can be carefully monitored and adjusted, yielding effects immediately. Posture modifications can be attempted and results can be readily observed. In short, we can observe ourselves and take immediate action on what we observe that improves our personal performance technique. Since warm-ups are similar from day to day, regular technical comparisons can be made.

Strengthening Weaknesses

All of us perceive weaknesses within ourselves, and oftentimes, these weaknesses are physical. Maybe you have a weak third finger on your left hand or problems with your right-hand thumb becoming too tense. Problems such as these can be initially addressed during your warm-up.

It is not good to create stress during a warm-up. You should never fatigue any particular muscle as you just begin to play. But you can design some of your warm-up exercises to pay just a little more attention to your weak spots. Not only can the extra physical activity be advantageous, but awareness of your weaknesses will aid in your gaining strength in these areas.

You may have a left-hand exercise that you perform that repeats finger patterns of 1 2 3 4 over and over in various locations on the neck. Focusing on the 3 each time and placing a mental accent on it will strengthen this move without adding stress to your exercise. If your right-hand thumb is tight or sore, play a one-string open roll at medium intensity, and concentrate solely on the thumb, forcing it to remain relaxed.

You are attempting to isolate certain parts mentally, but continue on as usual, physically exercising all parts equally. As you achieve success with this method, you may go one step further, and begin to isolate these areas physically, being careful never to stress the area being built up. After all, this is still the warm-up portion of your performance. Now, your left-hand exercise might be modified to 1 3 2 3 4, or 1 2 3 4 3, your right-hand exercise may increase in tempo, or you may shift your concentration to the thumb muscle, actually tightening and loosening repeatedly as you continue to play the open-string roll.

Reup

I mentioned earlier that players need to develop warm-up programs to fit their own performance needs. Performers go through many stages of physical condition during their careers, each stage presenting different physical demands. One particular stage that all bassists encounter at some point is the need to get back in good playing form after a layoff. The bass is a particularly physically demanding instrument. After a layoff period, it is not usually possible to just start playing at full steam without some serious physical discomfort.

This preparation to perform in top form after a layoff I call the *reup*. The reup is completely physical in nature. The performer has no need to enhance his musical abilities, but is only interested in rebuilding muscles and calluses so as to allow for painless performances.

This is the time for serious warm-ups. Remember that warm-ups use all of the performance anatomy relatively equally, and the rested bass player will need all parts rebuilt. Perform warm-up type exercises until your fingertips are slightly tender; do not develop blisters. Try to repeat warm-ups as often as possible daily, increasing intensity as physical form returns. Practice in this manner is not actually warming up, but rather, borrowing material from your warm-up programs to recondition your physical performance anatomy.

One is often required to perform immediately after a layoff period. This can be a very dangerous situation. Blisters, muscle strain, or worse can put you out of commission for a long time, so use careful judgment concerning hard playing after a layoff.

I have created for myself a dummy 12-inch practice neck from an old double bass neck someone was throwing away. I attached a tuner at one end and drilled a hole at the other to

run a string through. I use a screw for a nut. The string can be tightened and crudely raised and lowered by means of a movable bridge (a piece of small pipe). I call this device my “callus preserver.” When I must travel without my bass, I just carry it along and squeeze it as necessary. It doesn’t take up any space and works great on long airplane trips. At times, I carry this in my car and I can actually warm up on the way to the gig. This is not a very rewarding activity, musically, but I can avoid all of the reup hassles noted above. Maybe you can think of a creative way to solve your future reup problems.

Good Habit Cultivation

We are all creatures of habit. We all thrive on regularity. This is human nature tuning to the regularity of the universe. By addressing your instrument in a similar manner each time you play, you are setting up a series of habits—good habits. The playing of the warm-up exercise sets up your mind to begin functioning in a musical fashion. The muscles are prepared to react in a predictable manner due to the repetition of this process on a regular basis. You warm up, you play, you enjoy, you learn, and so on. You cultivate a need to warm up by warming up; this need to warm up causes you to warm up the next time that you play, which improves your performance ability and mentality each time you play. This can become an endless stream of positive actions perpetuated by your own desire to improve. This same line of thinking can be carried over to all of your practice efforts.

Warm-Up Exercises

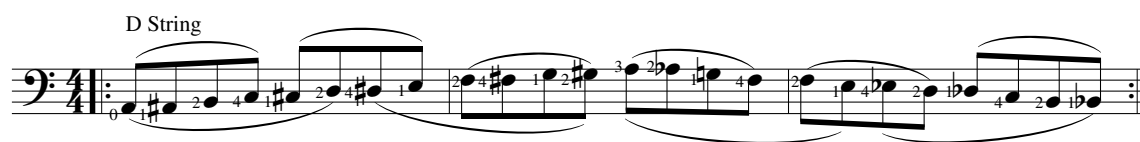
Double

Transpose to all strings, first bowing as shown above the staff and then as shown below. There are many creative ways to extend this exercise.

1. Transpose to all strings.



2. Transpose to all strings.



Electric

1. Transpose to all strings.



2. Transpose to all strings. Continue up each string to the octave or beyond. Be sure to play back to the starting note.



Fig. 11.1. Warm-Up Exercises

CHAPTER 12

A Lifetime of Healthy Performance

During my musical career, I have experienced a number of physical problems that have caused me considerable concern for my performance health. I have had numerous personal and professional consultations with orthopedic and neurological specialists. So, I speak from my experiences as a performer, an educator, and one who is concerned about physical health, not as a medical expert. It is my intention to set forth some general information related to this subject so as to help the reader become more aware of its importance, and possibly to inspire action towards conducting further related research. If you are experiencing any physical problems, such as those I will discuss in this chapter, I cannot stress enough the need to establish a relationship with a qualified physician whose expertise lies in the area of your particular problem.

Most major cities with a sizable population of performing artists (dancers, musicians, etc.) have clinics or doctors that specialize in performing arts medicine. Since this can be a very narrow field, the doctors often must be found through their affiliation with a major hospital. Make every attempt to seek out these specialists, if the need arises, for they are well-equipped to understand the physical ailments related to bass playing. If you cannot find an arts doctor, the field of sports medicine is closely related. After all, playing the bass is a lot like being a baseball catcher.

I have included a brief list of medical definitions that might be useful to the bass player, at the end of this chapter. For more detailed information, please consult with a doctor or an appropriate medical text.

Performance Anatomy

Most bass players consider their hands and fingers as the most important parts of their bodies. Although it is true that these are the body parts that actually touch the instrument and finish the task of producing music, the overall act of playing the bass is reliant upon the entire performance anatomy.

The governing part of your performance anatomy is your brain. It must already contain any ideas that you intend to act upon during a performance. Quality music is rarely an accident, but rather, is the result of long hours of thoughtful practice and preparation.

The brain differs from the rest of the performance anatomy in that it alone generates action through thought. It is not a muscle, but it is the control center for the muscles. It is important to keep the brain well-nourished and filled with the ideas of music. Stress and other factors that occupy your attention affect your ability to produce quality music.

If you perform standing, your performance anatomy gains support starting at the toes and progressing through the feet, up the legs, through the lower back, and culminating in the upper back. For those players who sit while performing, support begins in the pelvis and progresses through the lower back to the upper back. These structures may not be directly involved in the production of music, but their support is necessary for the ultimate product to be comfortably produced.

The actual musical thoughts produced in the brain are sent as commands via nerves through the neck and upper back area, under the shoulder and past the elbow, through the wrist and hand to the fingers. The pathway for this signal must be clear. It needs to be healthy and unobstructed.

So, in a nanosecond, your body and head are supported by your legs and back, your brain conceives of musical action, and your fingers react, guided by the angles created at your shoulders, elbows, and wrists. I hope you can begin to see how complicated this bass playing business can be.

There really are no parts of the body that don't get involved in the bass player's actions. Overall good physical and mental health and well-being will allow most bassists to prosper through a lifelong career.

General Factors to Consider

There are a number of general factors affecting a bassist's ability to obtain and maintain good physical performance technique. Some or all of these factors may affect you at any given time in your career. Many are avoidable, some are unavoidable. Proper attention to them can eliminate small physical annoyances that may grow into career-stopping ailments. Paying attention to these general factors can extend your performance career well past retirement age.

The most inevitable factor for all of us to consider is age, or growing older. If we are lucky, it will happen to all of us, gracefully. But it won't happen by accident. You must consider how your muscles feel and react as you age. Consider how your spine will feel after having a Jazz Bass hanging on it for twenty-five years or so. Listen to your body as it ages, and be vigilant about your health. If you enjoy performing, talk to some elderly bass players. Listen to their concerns; you may be hearing yourself, one day.

Many people are born with structural inadequacies or abnormalities. These can be skeletal or muscular in nature. An abnormality could be as major as having webbed fingers or as minor as having a slightly misshaped metacarpal bone. Some structural abnormalities can be corrected, but most require lifelong special attention and technique-related adjustments. Physical abnormalities can limit the amount of time a performer is able to perform, so it becomes very important that you use all your practice time wisely.

Your day-to-day lifestyle can prolong or shorten your career, depending on your living preferences. In general, good habits are as easy to form as bad habits. You merely must convince yourself of the positive effects that are caused by good habits.

Some of our bad habits have a direct impact on our performance anatomy. The excessive use of alcohol, tobacco, and salt can cause vitamin deficiency throughout the body. Caffeine and nicotine may constrict the blood vessels, lessening blood flow to areas in need of nourishment, and raising blood pressure. If you do use these products, try to exercise moderation. Always walk the middle path.

Nowadays, it seems as though everyone has a bottle of water with them. It looks so yuppyish, but consuming plenty of water each day is one of the best things you can do to maintain good health. Don't be embarrassed to carry that plastic bottle around with you on gigs or to the practice room.

Musicians who play at night and have a day gig often neglect obtaining the proper amount of rest and sleep. Rest and sleep are needed to allow the physical components of your body to regenerate. The proper amount of sleep is also necessary for good mental health. Many musicians who must work days and nights look for short power naps during the day for supple-

mental rest. This can begin by just resting for 15 minutes or so at a similar time each day. In time, you will be relaxed enough to fall asleep for 10 minutes or so. This type of rest cannot replace quality sleep, but for many, it can help to lessen fatigue over several very busy days.

Proper diet is also necessary for good physical and mental health, and it aids in gaining quality sleep time. Everybody knows how much easier it is to play the bass after three portions of fruits and veggies. Try to avoid that late night dinner after a gig. Eating before sleep lessens the quality of sleep.

Probably the single best thing you can do for yourself is to get good regular exercise. Not only will this keep your muscles in great shape, but it will increase your metabolism and strengthen your heart. As bass players, we get some great exercise loading equipment and performing, but we rarely get out of breath, which is necessary for good cardiovascular development. Take some time to swim, bike, run, or box. Do some aerobics with a friend, or join a class. Try some strength training to avoid physical problems in your future. A half hour to an hour of good exercise three times a week is all you need to stay in good shape. Exercise your large muscle groups the most. You may actually need to avoid exercise of your hands and forearms, if you are performing every day, so as to avoid overuse. Your exercise program should include stretching. I illustrate some stretches that are particularly useful to bass players later in this chapter. There are a number of books available on exercise and health, some of which I have listed in the Resources section at the end of this book.

Your technique, or the physical manner in which you play, may have a great effect on the longevity of your performing career. Poor technique will overtax your muscles and bones, causing undue strain that may lead to temporary or permanent injuries. Since we people come in all sizes, technique variations are commonplace. A respected teacher or a reputable performer can help you with technique-related issues.

Occasionally, you will find a musician who eats, breathes, and sleeps music, but most of us need non-musical diversions. By being involved in non-musical activities, we avoid becoming jaded to music, and we can keep our musical thoughts fresh and spontaneous. A non-musical diversion is any activity that takes us totally away from our musical life. Going to the gym, surfing the Web, working on old trucks, collecting coins, and going out dancing are all examples of non-musical diversions. Sometimes, we must try very hard to keep music out of our minds while we are on our diversions, but with a little practice, we can all get away to renew ourselves.

And, of course, since we are now in the twenty-first century, we all know how important it is to have a positive outlook toward life. It is true that life is so much easier with a positive

attitude. We must all work at centering on the enjoyment we derive from our music, and take joy in the work necessary to attain our goals. Try to look forward to positive experiences while correcting your faults. Attitude makes all the difference.

Factors for Special Consideration

A number of circumstances heighten the possibility of performance-related injury. All of us experience a number of these circumstances during our playing careers. This fact alone does not mean that we will have physical problems resulting from our experience. But these special situations heighten our chances for subsequent physical problems. The more these factors occur at one time, the greater the risk of physical injury.

Improper posture or the lack of adequate performance conditioning can cause many stress-related physical problems. These problems can be avoided by regular practice and proper technique. Good physical conditioning requires regular and prolonged effort.

Changing instruments requires you to use your muscles in slightly different ways, causing body angles to change to some degree. Typically, the muscles and tissues at strained points are built up through regular systematic practice. Suddenly adjusting the locations of these stress points can cause injury. If a new instrument causes you to make technical adjustments, allow ample time for your body to react. Players who double on several different basses are not as susceptible to this problem, as their bodies gradually become properly callused and are used to the adjustments necessary.

Probably the most common cause of performance related injuries to bass players is a sudden increase in playing time or drastic fluctuations of time spent playing from day to day. Our body works best under regular conditions. Suddenly adding large amounts of performance time can have career-stopping consequences. It is always best to increase performance intervals gradually. One must be foresighted and prepare properly for physical activities in the future.

Suddenly changing your technique, be it a good change or a bad change, can be an invitation for an injury. Here again, you must remember that your body tends to get used to what it has been doing. When you suddenly change activities, especially drastically, you are demanding new actions from muscles that have been trained to react in your old, familiar manner. Take the time that is necessary to make drastic technical changes gradually.

Many bass players have other jobs. Indeed, I have already mentioned that it is good to have non-musical diversions. Care must be taken, however, when a non-musical activity uses the same muscles as your bass playing. A job that requires typing and mousing on a computer

all day does not mesh well with an evening of bass playing. Similarly, shucking oysters at a seafood bar is not a good complement to bass playing on the side. The smaller muscles of the hands and fingers are especially at risk, but a bassist could injure his shoulder if he swims too many miles in a week. Listen to your body when it cries out.

Some people just don't know when to stop. You may know someone who claims to practice ten hours a day and plays gigs too. Well, if he is telling the truth, it is my hope that he has conditioned himself very well. Even if he has, he is a candidate for muscle and connecting tissue misuse and overuse. There is only so much that can be required of our tissue structures before they need to rest and rejuvenate. Even with perfect conditioning, much rest and rejuvenation is necessary. A certain type of mentality tends to deny this fact, opening the player up to a host of physical maladies.

Cold can be a wonderful aid in healing, but it is detrimental to the working muscle. Muscles perform at their peak at around 103 degrees. This is why we warm up. This is why we avoid performing in the snow. Certainly, light playing while chilled will not be a problem for most players, but aggressive playing, with cold muscles, is an invitation for a serious injury. Cold muscles do not possess the ability to be as accurate as warm muscles do, also casting a shadow on your performance ability while chilled.

Many players incorporate excessive, unnecessary movement into their playing technique. Although extraneous movement does not, in itself, affect your musical output, it brings on early fatigue. Performing while harboring physical or mental tension also brings on early fatigue. Many players are forced to perform regularly in a fatigued state due to hectic living schedules. This is quite unhealthy. Generally, aside from inviting physical injury, this type of activity produces a less than acceptable musical result.

I'm sure you all know a macho guy who can just work right through any pain. He seems to be able to literally master the pain. In sports, this is called the "good sport's attitude." In bass playing, we call it "stupid." Listen to your body, and react to what it is telling you. When you feel unusual pains that don't go away, stop playing and find some help. Denial is a very strong force, acting within all of us at one time or another, but consider that denial may cost you all of your future performances.

These factors listed above can be controlled with some common-sense effort on your part, but there are a number of special factors over which you do not have complete control.

A previous injury, such as a broken bone or deep slice to the hand, can create an inherent weak spot that will need your constant attention if you are to perform pain-free. Previous injuries often cause one to make adjustments to common performance technique.

Having a virus or other current infection, be it chronic or otherwise, should curtail your performance activities. Viruses and other infections, in general, have a negative effect on your entire body, causing it to be in a weakened state. In this weakened state, you are more vulnerable to injury through normal or slightly overactive playing. Metabolic and endocrine problems will also affect the ability of the body to rest, heal, rejuvenate, and ward off injury. These problems require special care and a trip to the doctor. Don't just keep working; you might make the whole band sick.

We have no control over our genetics, but genetics can play a major role in your performance career. All your physical attributes came from your ancestors, and many of your physical shortcomings came from the same place. If you have a family history of certain ailments, you may be more likely to develop the same kinds of problems. Knowledge of your family's medical history can be an aid in avoiding many performance injuries. Get to know your grandparents.

The more of these circumstances you encounter, the more at risk you may be for a performance injury. If you broke your finger last summer, just bought a new bass, just picked up a day gig as a massage therapist, have a slipped disc, and figure that you can work through all this pain no problem, you might be in big trouble.

Common Bass Player Ailments

As of this writing, I have played bass for thirty-four years and taught bass for twenty-seven. My expertise is in performance and education. Consequently, it is not my intention to play doctor, but I would like to outline some of the most common bass player ailments that I have observed as an educator/performer. Although many conditions can be corrected through performance technique adjustments and supervised rehabilitation, there always seems to be another bass player waiting in the wings, ready to fall victim to one or more of these maladies. Most of these ailments can generally be classified under the heading of *repetitive motion disorders*. They occur because we perform the same motions over and over, beyond our physical limits. All of these disorders can be affected by the general and special consideration factors listed above. Many bass players attempt to manage these disorders by the use of over-the-counter drugs, such as aspirin, naproxen sodium, ibuprofen, and acetaminophen. It may be all right to manage an occasional twitch in this manner, but it is foolish to self-diagnose and prescribe your own medicine when a serious problem may be present. Seek out a doctor when your body asks you to.

Tendinitis

During normal use, the tendon gently slides back and forth in a lubricated sheath as body movements occur. When movements become reckless, prolonged, or when an external injury has been incurred by the tendon or sheath, pain is generated and tendinitis occurs. Mild tendinitis may heal in a week, with proper treatment. Severe tendinitis can last for months and may bring a promising career to a grinding halt.

Tendinitis can occur at any location where bone and muscle join. For the bassist, the most common locations are the thumbs, the hands, the elbows, and shoulders. Symptoms include severe pain, limited motion at the location of the injury, and redness or inflammation in the area.

Most cases of tendinitis can be cured with proper medical attention, but repeated injury to the same area, or not allowing an injury to completely heal, can create a chronic problem.

Tendinitis is the most common ailment experienced by bass players. It can affect any and all of the joints between your head and your fingers. Your best defense is proper conditioning and good technique.

Bursitis

The *bursa* provides lubrication at joints. This lubrication is provided for all the parts that join at a joint, including bones and tendons. If the bursa becomes irritated for any reason, pain occurs in the affected joint. The elbow and the shoulder are the most common locations of bursitis in bass players.

It is widely believed that genetics plays a role in selecting candidates for bursitis attacks. Other causes include poor conditioning and injury to the bursa.

Bursitis can be quite painful, and it is really not possible to perform if you are experiencing a severe case. It would not be wise either, as continued irritation to the bursa will prolong the rehabilitation time. Swelling and inflammation are often present alongside the acute pain.

Don't be thinking that bursitis is just for old guys. Young bass players mistreat their bodies too, and although bursitis is more common in older players, it can strike teens as well.

Bursitis can be a complicated disorder to treat. Doctors generally recommend ice, heat, elevation, rest, surgery, medication—you get the picture. As is the case with tendinitis, your best defense is proper preparation and sensible playing.

Nerve Compression

The nerves that operate your hands and fingers originate in the brain. On the way to the fingers, they pass through the shoulder, the elbow, and the wrist. At these locations, there is a danger of entrapping or pinching. There are a number of specific nerve entrapment disorders, including the most famous, carpal tunnel syndrome. Nerve compressions can be painful and are usually accompanied by numbness. The location of the numbness helps your doctor determine which nerve is being entrapped and where.

Flexing or stretching can often cause a nerve compression to hurt more, making proper performance technique impossible. Solutions to nerve-related problems always include plenty of rest from playing. Serious nerve impingements left untreated can cause permanent damage, as nerves eventually die due to the lack of nourishment. It is important to identify the source and cause of any nerve-related problem and to begin problem solving at once. The healing time required by injured nerves is quite long, so be patient with yourself.

Ganglion Cyst

Ganglions are calcium deposits. They can range from small and insignificant to large and very painful. The most common locations that warrant attention by bassists are above or below the wrist and above or below the hand. Ganglions are usually hard, and can range in size from minuscule to marble size, as they form gradually over long periods of time. Formation is usually relative to a tendon and is often caused by a previous injury to the cyst location, or a defect in the tendon sheath that allows fluid to leak, subsequently hardening into the cyst.

Ganglions may dissipate by themselves, if given proper treatment. If the injury is not tended to, the ganglion may continue to grow and require surgical removal. It is possible to have a large ganglion and not experience pain and discomfort, but if formation is related to bass playing, the cyst most often causes varying degrees of discomfort, often requiring removal.

You can reduce the risk of a ganglion developing by taking extra care to protect your hands from trauma and taking the time to warm up and stretch before performances.

Muscle Strain

Muscle strain is caused by overusing or misusing muscles. Misuse could be related to not getting enough rest and sleep or poor nutrition. Rest and good health practices correct this problem.

The pain associated with muscle strain is located in the muscles. Therefore, it is not usually located at the joints. The most common muscle strain for bassists is in the left top forearm.

Muscle strain can often be a forerunner of other problems. It can be an initial indication of the eventual wear of bad habits. It is therefore important to step back and evaluate your performance and lifestyle habits when muscle strain and pain are present.

Focal Dystonia and Chronic Muscle Pain Syndrome

Focal dystonia and chronic muscle pain syndrome are often confused with each other, but they are different.

Focal dystonia is thought to be caused by excessive repetitive practice. It does not usually present pain, but rather, involves the loss of coordination of specific muscles. It usually starts as only occurring while at the instrument, but gradually incorporates itself into daily life activities. It is rarely experienced by casual performers and is very unusual, but more common, for the professional. Successful treatment is possible but not assured.

Chronic muscle pain syndrome, as its name suggests, involves pain. This pain is not usually severe, but rather is often generalized as overall fatigue or general soreness and stiffness. Oftentimes, the soreness extends throughout the body, being more severe in the areas of performance usage. Treatment often includes massage therapy, rest, and cold packs.

These two conditions are not common, but it is possible for professional performers to develop problems that may include them. Knowing your own body and how it functions, along with healthy performance habits, will generally shield you from these disorders.

Back Problems

We hang basses on our backs, we crouch over our instruments, we schlep heavy, bulky equipment around on a daily basis—it's no wonder so many bass players have back problems. It is obvious that people in our profession can develop problems with their backs, and there are numerous conditions that can develop. Common problems include muscle strains or tears, nerve pinches, and damaged disks. There are also a number of congenital problems that can afflict our backs. Any back-related problem is serious, and all require professional help. Never lose sight of the importance of back support. Doctors, massage therapists, and chiropractors can all be of help in solving your problems.

But it is best to avoid problems initially. Practice good posture. Keep your back fit through regular cardiovascular exercise and weight training. Eat nutritious foods, and make every effort to keep your weight close to ideal. Get the proper amount of rest and sleep, paying attention to good sleeping positions and what you are sleeping on. Lift with your knees, keeping your back straight. Seek professional help with your performance posture from successful performers.

Blisters

Blisters may form on fingertips and around the thumb. You are particularly susceptible to them when you suddenly play a great deal after a layoff period, increase your normal playing time drastically, raise the action of your instrument, play much harder than usual, or change your technique to expose soft skin to string wear.

A blister is a temporary inconvenience that will heal in time, but it will cause much discomfort in the interim. It is not wise to continue to play after a blister begins to develop, but sometimes this is necessary as demanded by your job. Blisters will almost always eventually split open and peel, causing you to lose what protection you may have built up.

Smart players avoid blisters through preparation. Experienced players are able to sense the amount of callus necessary to make playing comfortable, and they see to maintaining the calluses necessary for their current performance needs. After a layoff, callus preparation is necessary in advance of performance dates, or blisters may develop.

Controlling blisters comes with experienced playing. Most professional players maintain their calluses even through a layoff. Most bass players feel naked without their calluses.

RICE and Rehabilitation

RICE stands for rest, ice, compression, and elevation. RICE is the universal cure for acute injuries. Rest the injury, apply cold, compress the injury if open, and elevate to control blood flow.

For the performance-related injuries that bass players experience, the aspects of rest and ice are most useful. All of the injuries listed above require rest for the healing process to begin. Ice, or cold, is used as a means to calm down inflammation without the use of drugs. The use of ice also brings the area treated to a restful state quickly, further hastening the healing process.

Ice should be combined with rest, for if ice is used and work follows, major injury is more likely. Muscles work best when warmed up. The same can be said of other tissues used during performance. If a player with thumb tendinitis ices his hand and then goes about playing, he is risking deeper, more complicated injury and defeating the healing process.

Rehabilitation can begin as soon as an injury is properly diagnosed.

The first step of rehabilitation is eliminating the injury. This is where your doctor's guidance is most useful. Always follow your doctor's advice in healing your injury. Take as much time as is needed to complete the job.

Once healing has been achieved and pain is no longer present, you must begin to restore proper movement. This initially involves simple, non-stressful movements designed to lay the groundwork for proper performance technique.

When your biomechanics are restored and you can perform the proper movements without pain, you will need to incorporate stretching. This will begin the restoration of the flexibility needed to perform properly.

If all goes well, the next step is to begin to build strength. Strength is best built through progressive exercises that are sport specific. This means that it is time to play the bass again. Begin slowly, and pay careful attention to proper technique. Some injuries may require technical adjustments. These adjustments can begin to be accomplished at this stage.

The final stage of rehabilitation is building endurance. This step is merely an extension of the previous step. Practice should involve conditioning exercises and much repetition. Most of this work will again be sport specific, at the bass. Care must continue to be taken to adhere to proper technique, and performance time must be increased gradually. Never hurry.

Preventive Care and Maintenance

It is always better to avoid an injury in the first place and avoid rehabilitation altogether. There are a number of simple things that, if given proper consideration, can greatly reduce your chances of injury.

Pay careful attention to your body posture. Observe your stress points while standing and performing. Look for ways to reduce this stress. Double-bass players might consider using a stool, but be careful to maintain good posture and biomechanics while on the stool. Generally, the stool should not reduce your height by more than a couple of inches.

If you play electric, check out your strap. Generally, wider is better, as weight is more evenly distributed with a wide strap.

Use a mirror when you practice. It is sometimes easier to see discomfort in early stages than it is to feel it. Playing should be fun, and it should feel good. It should look comfortable too. Avoid sharp angles, a slumping body, standing on one foot, and holding the bass too low or too high.

Pay particular attention to your hand/arm posture. Try to round out sharp angles into circles (see fig. 12.1). Sharp angles encourage stress. Consider the strength of a circle. Consider the strength of your hand holding a large orange. Now consider how much weaker is your grip of a golf ball held by the fingertips (see fig. 12.2). Try to emulate the more powerful position at the instrument.



Fig. 12.1. Hand/Arm Posture

Keep yourself in good physical condition through regular exercise that is not related to bass playing. You can't expect your arms and hands to function well if you neglect the rest of your body.

Stretching is an often-overlooked aspect of practice, conditioning, and maintaining good physical health. Stretching should never be done when cold. Moderate stretching can be beneficial after a modest warm-up, and more intense stretching can be accom-

plished after practice or performance. Stretching should not hurt. I recommend avoiding the use of stationary objects to aid in your stretching. Stretches should be held for about twenty seconds or so to be beneficial (see fig. 12.3). For more detailed information on stretching, I recommend consulting a physical therapist or checking out your dog or cat.

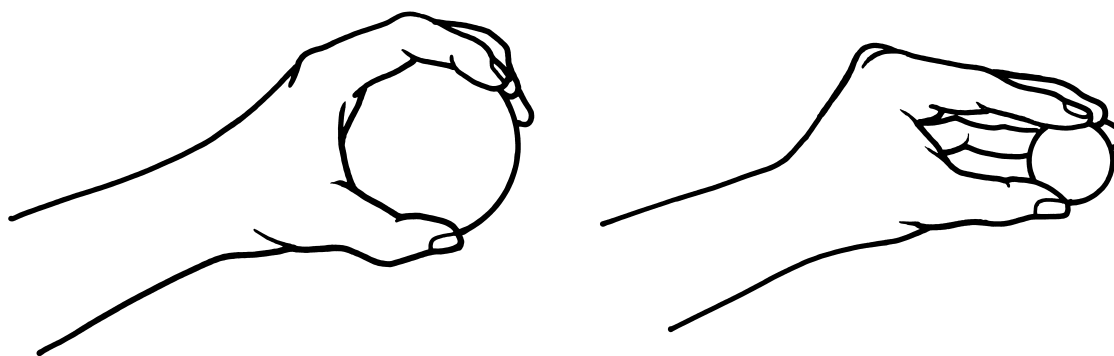


Fig. 12.2. Orange and Golf Ball Grips

Everyday Stretches

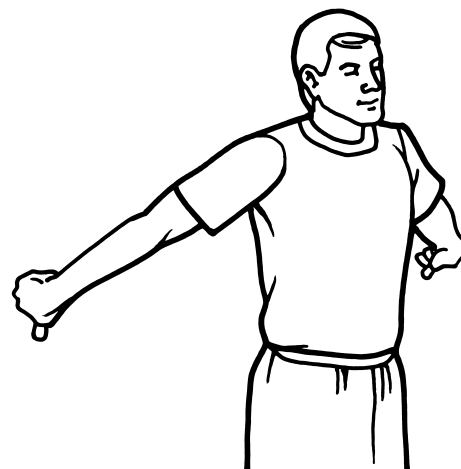
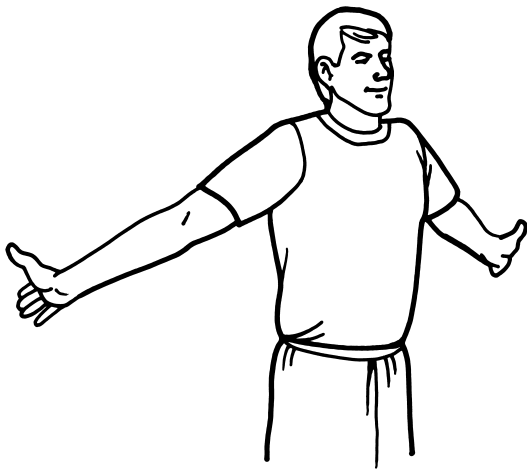
Arm Stretches



Triceps Stretch



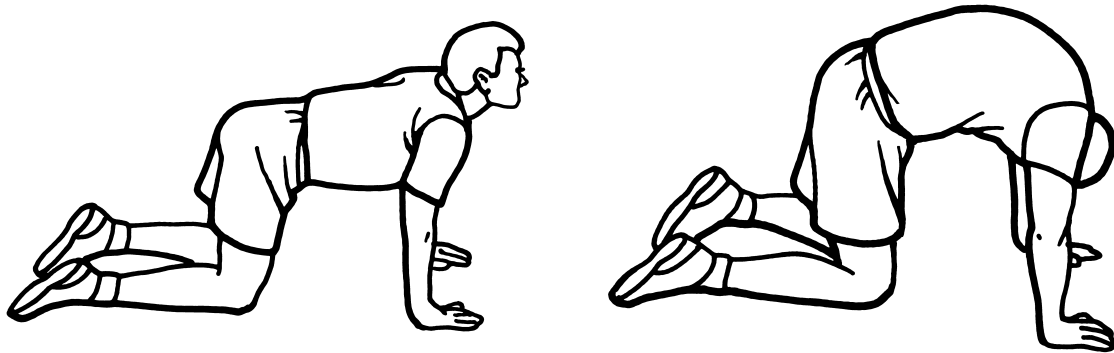
Hug



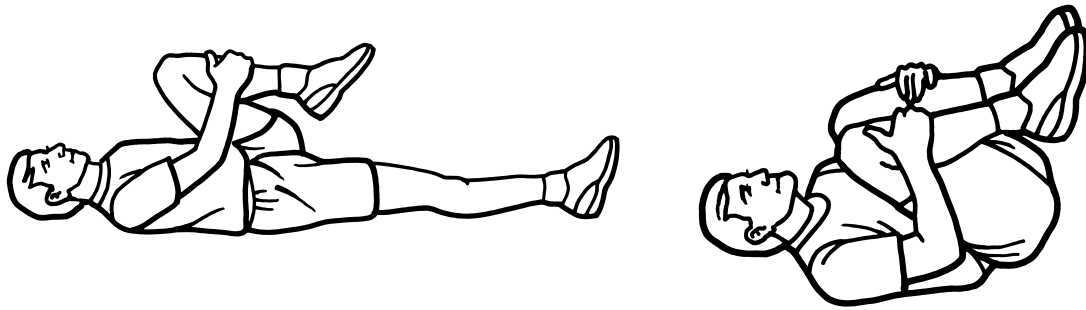
Complete Arm Stretch

Fig. 12.3. Everyday Stretches. Hold each position for about 15-30 seconds, and repeat several times.

Back Stretches



Cat Stretch



Lower Back Stretch

Fig. 12.3. Everyday Stretches. Hold each position for about 15-30 seconds, and repeat several times.

Medical Definitions

Bursa sac	The structure responsible for lubrication between and around tendons and bones.
Calcium deposit	The hardening of soft tissue, this usually occurs after repeated overuse or injury.
Carpals	Wrist bones.
Cartilage	The connecting tissue between bones. It is harder than ligament and softer than bone. It allows for smooth movement.
Fibrositis	The inflammation of connecting tissue, muscles, joints, tendons, or ligaments.
Itis	Inflamed.
Metacarpals	Palm bones.
Muscle	Tissue that produces movement through contractions. It functions best warmed up.
Neuritis	Inflammation of a nerve.
Radius	The thumb-side forearm bone.
Scar tissue	This forms after serious injury to replace lost tissue. Repeated injury widens the area of scar tissue causing permanent weakness.
Soft tissue	Anything but bone.
Tendon	The fibrous cord which attaches muscle to bone. It usually runs inside of a sheath.
Ulna	Pinky-side forearm bone.

Considerations When Purchasing an Instrument

When someone tells me that they want to purchase an instrument, and what do I think, I always ask them the same two questions: “Do you like it?” and “Do you have the money?” These are, of course, simple, obvious questions, perhaps too simple and obvious. But a considerable amount of thoughtful consideration should be put into them before acting. Ultimately, these really are the only two questions you need answer.

When I ask if you like it, I am actually asking if it suit your needs. There are a number of factors to consider when answering this question.

Obviously, if you can afford an instrument, you can buy it, but should you? If you love an instrument, no amount of money is too much, is it?

How can you determine if an instrument suits your needs and what a fair price is? There are no definitive answers to these questions that will suit everyone, but there are some guidelines that all should consider.

In all cases, you must do your homework. The Internet and your local music stores are good places to start. Do some research to get a feel for what is available and how prices are running. Your most important action in this regard is to talk to as many other bass players as possible, trying to extract pertinent information from their experiences.

Does it suit your needs? Consider this question without thinking about the price. Try to answer these secondary questions first to determine your needs.

How experienced of a player are you? Are you a beginner? Are you sure you will be playing after five years? Are you playing gigs now? What don't you like about your present instru-

ment? Are looks important? Do you require some bells and whistles? Are you looking for new or used? Is a brand name important? Have you considered a custom-made instrument? Do you know exactly what you want? What kind of music are you currently performing? Might you need several different instruments to meet your performance needs?

I could go on, but I think you might be getting the idea. You need to analyze your personal and professional requirements of an instrument. As you answer questions such as these, a clearer picture of what you think you need from an instrument should begin to appear to you. It is your answers that will ultimately teach you about the instrument that you need.

You need to play instruments that fit your criteria of what you think you want. Be sure that you do lots more homework here. Unless you are a beginner, you should play as many instruments as possible, so as to get a feel for all of the options available. Do not consider price at this point.

My advice to beginners, in this regard, is to seek counseling from a professional player of fifteen or more years, who has no vested interest in selling you a bass. A performer such as this can lend his experience to your research. Also, try to avoid a more complex bass for your first instrument, as beginners should be concerned with basic musical technique, not instrument types and options. Beginners have no concept of what they need from an instrument, and in most cases, a basic Fender, or the like, is the right choice in an electric. A used Kay or King plywood, or the like, is a fine choice for your first double bass. Many players form entire careers around instruments such as these, and you may be pleasantly surprised to find that you never need to purchase another bass.

The money issue is a little more cut-and-dried, but no one wants to overpay for something unnecessarily. If you can afford the instrument you have settled on, then go for it, but if you are short money, you may need to adjust your thinking somewhat. Comparison shop. Shop like you might for a car. If you are selling your present instrument, try to sell it outright rather than trading it in. This will help you to obtain top dollar. If you can afford to keep your present instrument, it may just come in handy as your career changes, matures, and sometimes circles.

With the tax laws as they are presently, your instrument purchase is a depreciation write-off, as long as you use it to generate income. This is, of course, the case for all of your musical equipment used to generate income, so you can consider a yearly savings in this manner, depending on your method of depreciation. The tax laws concerning depreciation and self-employed musicians are quite complicated, and you are well advised to research this subject thoroughly. The IRS has a number of free booklets related to this subject available to the public.

Prices of new instruments are not as negotiable as used ones, but you always stand a chance of lowering the price if you have done your research or can pit one seller against another. You need to be an informed consumer.

In general, buying a used instrument is a lot like buying stock. The price depends greatly on supply and demand. Naturally, prices will be higher in areas of large musical communities, and supplies will be low in out-of-the way places. But the world is connected via the Internet now, and for those of you savvy in its use, there are many fair deals to be obtained.

The prices of good electric basses can be as little as \$300 or so and as much as \$5,000 or more, so your research can pay off in lots of dollars to fill your hatchback's tank many times.

Double-bass prices can be a little more off-the-wall. Used plywoods needing some cosmetic or other minor work can often sell for under \$1,000. Better quality plywoods can sell for up to \$3,000 or more. Decent carved instruments usually start in the \$3,000 range, and quality newer carved instruments are usually in the \$10,000 to \$15,000 range. If you think this is a lot of money, consider the fact that fine old instruments, like those used by the major orchestra players, are often valued from \$20,000 to \$50,000, or more!

If you are purchasing a carved double bass, it's a good idea to find out as much specific history related to the instrument as possible. Knowledge of previous repairs and owners, along with locations where the bass resided, can help you to anticipate future repair and maintenance needs.

Double bassists may also need to purchase a different bow. Of course, they come new or used, light and heavy, stiff and flexible, and as discussed earlier, are made from a number of materials. Again, I cannot tell exactly what you want to look for when shopping for a bow; only playing experience can teach you this. I do, however, believe that it is foolish to spend more than \$200 to \$500 on a bow unless you are a professional, working for a living, and know exactly what you want from it.

Many musical equipment catalogs offer a number of varying quality bows, which usually must be purchased sight unseen. Most often, you can send them back and try again, if you don't like them. This is a fine way to obtain a first bow or a fiberglass bow, but the experienced player will be best served to find a local source where many quality bows can be compared first hand.

Beginner to expert players can often make beautiful music for a lifetime with bows selling for under \$500. If you do decide to purchase a more expensive bow, you can keep your old bow to use when your good bow is being rehired. As with purchasing a bass, the most impor-

tant thing you can do is to play as many bows as possible. Try not to consider the price as you first compare bows. You may just find that you like the least expensive one the best.

Do you like it, and do you have the money? It's really very simple, if you do your homework.

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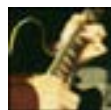
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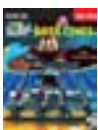
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